** 2007.08.14

*** Releases

Robert working on new client release - improvements to the tape status web page (to provide a link to the enstore web page so we can click and see if the tape is really no access). Make sam get dataset more flexible (e.g. so that it'll work at DO).

No new DB server for now. Randolph is working on changes due to retired date. May have to rebuild IDLs. Check for backwards compatibility.

*** D0 see mail

Power failure on Friday - SAM stopped working even though FCC was on generator. Because the primary DNS on d0ora2 is located at D0 - and the D0 DNS went down. There is a backup, but the connection rate was so high that the nameservice failed. Will change DNS server to one in FCC.

d0dbsrv10 was blocked by the autoblocker after fixing slow queries (lots of queries finally started running). 110 hosts tried to contact within a minute. We thought we had asked that these machines be exempt (and strange that just one got blocked). Should verify that the d0db machines are exempt.

*** CDF

Power outage last Monday morning - nfs mounts lost on many linux nodes (problem with yp). Problems also with CDF dCache (ups had a bad battery - power was lost to many CDF dCache and enstore nodes). When power restored, all nodes came up at once - ordering problems. Many nodes did not mount pnfs. Some pool nodes did not mount their pool disks. Nothing was affected by power failure on Friday.

No other issues.

*** MINOS

*** DB

*** dCache/enstore

Downtime last Tuesday to move power on movers was uneventful. Power failure on Friday had no affect on systems. During outage on Monday, SL85 facility at FCC (tape robot and movers) stayed up on UPS.

A machine in the Enstore DB lost a disk (but has a spare, and a service call has been placed). stkensrv1 raid (pnfs server) lost a power supply -- running on backup.

No immediate plans for downtimes.

Interesting that two raid arrays on stken failed – part of the same purchase. Did they all just go off warranty? :-)

```
From: Daria Zieminska <daria@indiana.edu>
Subject: Re: SAM Operations Meeting
To: Adam Lyon <lyon@fnal.gov>
Cc: sam-design@fnal.gov
Date: Tue, 14 Aug 2007 08:42:30 -0400 (EDT)
D0 Sam shift report Aug 6 - Aug 13 2007
Open Issues:
 2905. Globus error 94
Job willem_dorsvlegel.nikhef.nl_182544_28761 is in status held with
the diagnostic Globus error 94: the jobmanager does not accept any new
requests (shutting down: SAM Grid Job Summary Job Information ...
Assigned to abaranov
 2898. Large number of file delivery errors
trying to process some recent files and I keep getting file delivery
errors ...
Robert:
File recoT_all_2_0000233971_mrg_105-109.raw_p20.08.01 is on_tape
                                                            Robert's new client will have this link
PRZ17111, which is NOACCESS (see
http://www-d0en.fnal.gov/enstore/tape_inventory/NOACCESS).
                                                            on our enstore pages.
 2895. durable location for cab
Joel Snow:
I am observing MC merge jobs on CAB2 pulling unmerged tmbs from the
durable location
at ouhep00.nhn.ou.edu. There was supposed to be 1 TB of durable
location storage available at FNAL for MC. Why isn't CAB2 and and
                                                                 Not sure why getting files from
cms-fnal-wc1
at least using this area? Has it been deployed and configured?
                                                                  OK - are they at FNAL?
Assigned to D0expert
Resolved
 2907. MC request 75032 cannot be merged
```

Two jobs to merge the thumbnails of request 75032 fail: willem_dorsvlegel.nikhef.nl_095556_17799 willem_dorsvlegel.nikhef.nl_144703_20596. A. Baranovski: %50 of the dataset you are trying to merge is unavailable now as it resisides on the unmounted partition. Sabah should be able to fix it eventually. Meanwhile add "and full_path dodge.hep.man.ac.uk:/data/sam/durable" clause to exclude bad files.

2906: declare files bad 2893: Declare files as bad Done by the shifter

2903,2902: sam database inaccessible.

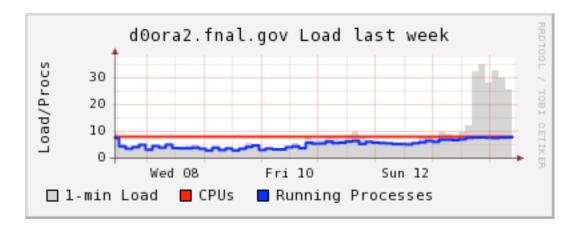
Resolved by Robert: "Some very slow queries were blocking the db server. I've messed

around with one of the Oracle optimizer parameters and got them to run the trigger web server is much faster"

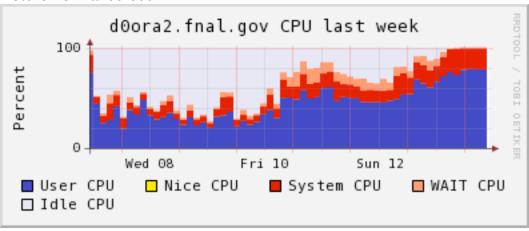
2900 most sam jobs on cabsrv2 are failing Robert: Apparently I miscalculated the new size of some of the cache disks on the worker nodes. Fixed.

Problems still ocurring now should not be resolved! It looks like a big report on being triggered by a google spider.

Pictures from Ganglia showing high load on d0ora2



Note CPU maxed out



```
From: Arthur Kreymer <kreymer@fnal.gov>
Subject: Minos status 2007 Aug 14
To: sam-design@fnal.gov
Cc: minos_sam_admin@fnal.gov
Date: Tue, 14 Aug 2007 08:59:44 -0500 (CDT)
                    Minos status 2007 Aug 14
General -
    Will upgrade Minos Cluster and all servers ( SAM, Mysql ) to SLF 4.4
        on Thursday 16 August.
Enstore -
DCache -
    Slow ROOT DCache reads in root >= 5.12
dCache 1.7.0-39 claims to provide vector I/O, installed on FNDCA
        Still need tagged root release supporting this.
SAM
    IT 1894 Need 'sam locate' in C++ API
        Users really need this feature.
Oracle
OPEN ISSUES
    IT 1894: sam locate via C++ api, for simple client needs
    IT 1979: Compiler warnings from sam_cpp_api
    IT 2071: quadratic project startup time growth (from Nov 1 2005)
PLAN
    Migration to 9940B tape can proceed anytime - when ?
    Update Minos dbservers and clients to v8
```

From: Diana Bonham <diana@fnal.gov>

Subject: Re: SAM Ops Meeting Tuesday 9:30am FCC1 88SAMDH

To: sam-design@fnal.gov

Date: Tue, 14 Aug 2007 08:53:16 -0500

Announcement:

Oracle's July Security Patch has been released. DBI/DBA group be scheduling downtimes for

D0, CDF and MINOS databases.

D0 :

- Scheduling July's DB patch on d0ofint1 and d0ofprd1 Sep 4. Already done on d0ofdev1 7/31/07.
- August 7th d0ofprd1 will be moved to 3par SAN. 8-10 hours downtime. Also the home areas on d0ora2
 will be moved to 3par. Done.
- SAM cut $v6_10$ on d0ofdev1 To add composite index on lower(file_name) and retired_date
- Cut v6_19 of sam_db_seed_data and installed on d0oral. (composite index on lower(file_name) and retired_date
- Very poor SAM query performance starting late 8/10/07. DBA's re-started the weekly cron to analyze SAM tables/indexes.
- In addition, d0ora2 CPU is pegged at 0% idle, with load averages peaking in the 50's and 60's, normally below 10. This

started happening intermittantly Sat/Sun, now it is happening frequently.

Alerts:

- Tablespace [SUPPORT_01] is [85.67 percent] full

Action : Added 2GB

- v6_4 index on create_date of data_files against d0ofdev1 done
- Service Request with Oracle on Full table scan Vs Index scan on data_files_param_values.

Development is working on Bug Fix. Bug# 5601578 No time estimate yet for bug fix.

SAR# 5837876.993

CDF :

- Scheduling July's DB patch on cdfofdev/cdfofint for Aug 08

Alerts :

Action: Increased the maxextents to 300

MINOS :

- Scheduling Oracle'S July Security Patch and OS patches for 08/16/2007 starting 8am.

Expected downtime for 1.5 hours.

The motherboard was replaced on minosora3 on Thursday 06/21/2007
 This didn't fix the CPU warnings.

Now on June 26, Sysadmin attempted to make the size of dimms same as per consultation

with d1/sun. Also new kernel has been installed. CPU warnings still exist. More diagnostics info done on Aug $06\,$

- v6_4 index on create_date of data_files against minosdev - done